

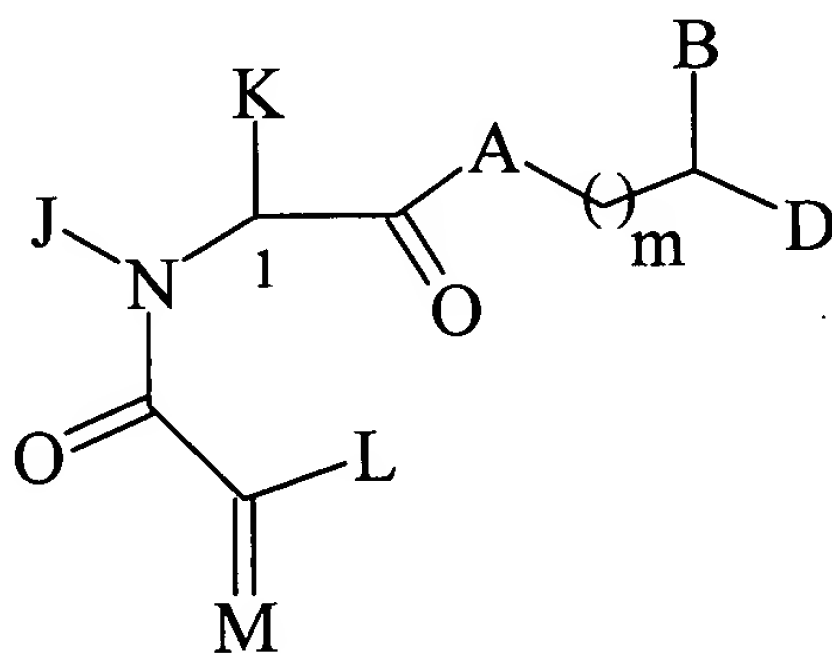
IN THE CLAIMS

Please cancel claims 1-4, which were allowed, as amended, in U.S. Patent Application Serial No. 09/089,373. Please cancel claim 7 without prejudice or disclaimer of the subject matter therein.

Please amend the claims as follows:

5. (Once amended) A pharmaceutical composition which comprises:

- (i) an effective amount of a compound [pipecolic acid derivative] for treating alopecia or promoting hair growth in an animal in need thereof, wherein said compound is [the pipecolic acid derivative is a compound] of formula I



or a pharmaceutically acceptable salt, ester, or solvate thereof, wherein:

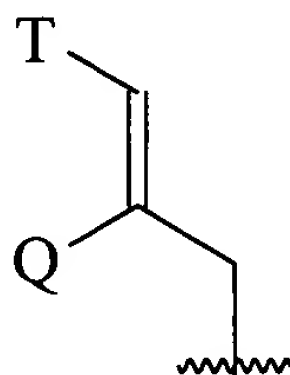
A is [CH₂,] O, NH, or N-(C₁-C₄ alkyl);

B and D are independently Ar, C₅-C₇ cycloalkyl substituted C₁-C₆

straight or branched chain alkyl or C₂-C₆ straight or branched chain alkenyl, C₅-C₇ cycloalkenyl substituted C₁-C₆ straight or branched chain alkyl or C₂-C₆ straight or branched chain alkenyl, or Ar substituted C₁-C₆ straight or branched chain alkyl or C₂-C₆ straight or branched chain alkenyl,

wherein in each case, one or two carbon atom(s) of said alkyl or alkenyl [may be] is/are optionally substituted with one or two heteroatom(s) independently selected from the group consisting of oxygen, sulfur, SO, and SO₂ [in chemically reasonable substitution patterns],

or B and D are independently the fragment



wherein Q is hydrogen, C₁-C₆ straight or branched chain alkyl or C₂-C₆ straight or branched chain alkenyl; and

T is Ar or C₅-C₇ cycloalkyl substituted at positions 3 and 4 with substituents independently selected from the group consisting of hydrogen, hydroxy, O-(C₁-C₄ alkyl), O-(C₂-C₄ alkenyl), and carbonyl;

Ar is selected from the group consisting of 1-naphthyl, 2-

napthyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl and phenyl, monocyclic and bicyclic heterocyclic ring systems with individual ring sizes being 5 or 6 which [contain] have in either or both rings a total of 1-4 heteroatoms independently selected from oxygen, nitrogen and sulfur, [;]

wherein Ar [contains] has 1-3 substituent(s) independently selected from the group consisting of hydrogen, halo, hydroxy, hydroxymethyl, nitro, CF₃, trifluoromethoxy, C₁-C₆ straight or branched chain alkyl, C₂-C₆ straight or branched chain alkenyl, O-(C₁-C₄ straight or branched chain alkyl), O-(C₂-C₄ straight or branched chain alkenyl), O-benzyl, O-phenyl, amino, 1,2-methylenedioxy, carbonyl, and phenyl;

L is either hydrogen or U; M is either oxygen or CH-U, provided that if L is hydrogen, then M is CH-U, or if M is oxygen then L is U;

U is hydrogen, O-(C₁-C₄ straight or branched chain alkyl), O-(C₂-C₄ straight or branched chain alkenyl), C₁-C₆ straight or branched chain alkyl, C₂-C₆ straight or branched chain alkenyl, C₅-C₇ cycloalkyl, C₅-C₇ cycloalkenyl substituted with C₁-C₄ straight or branched chain alkyl or C₂-C₄ straight or branched chain alkenyl, (C₁-C₄ alkyl or C₂-C₄ alkenyl)-Ar, or Ar;

J is hydrogen, C₁ or C₂ alkyl, or benzyl; K is C₁-C₄ straight

or branched chain alkyl, benzyl or cyclohexylmethyl; or J and K are
taken together to form a [5-] 7 membered heterocyclic ring which is
substituted with oxygen, sulfur, SO, or SO₂;

[n] m is 0-3; and

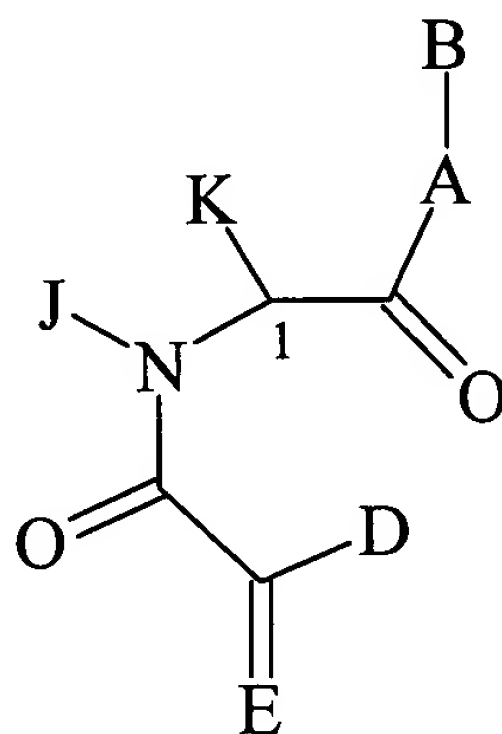
said [pipecolic acid derivative] compound has an affinity for
FKBP-type immunophilins; [and]

(ii) a second hair revitalizing agent; and

(iii) a pharmaceutically acceptable carrier.

6. (Once amended) A pharmaceutical composition which
comprises:

(i) an effective amount of a compound [pipecolic acid
derivative] for treating alopecia or promoting hair
growth in an animal in need thereof, wherein said
compound is [the pipecolic acid derivative is a compound]
of formula II

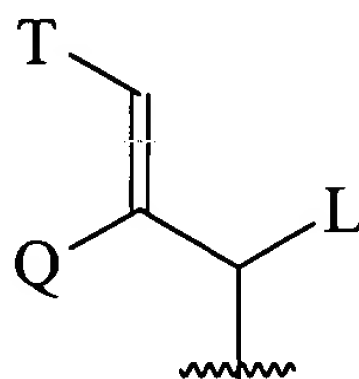


II

or a pharmaceutically acceptable salt, ester, or solvate thereof,
wherein:

A is O, NH, or N-(C₁-C₄ alkyl);

B is hydrogen, CHL-Ar, C₁-C₆ straight or branched chain alkyl,
C₂-C₆ straight or branched chain alkenyl, C₅-C₇ cycloalkyl, C₅-C₇
cycloalkenyl, Ar substituted C₁-C₆ alkyl or C₂-C₆ alkenyl, or



wherein L and Q are independently hydrogen, C₁-C₆
straight or branched chain alkyl, or C₂-C₆ straight or
branched chain alkenyl; and

T is Ar or C₅-C₇ cyclohexyl substituted at positions
3 and 4 with substituents independently selected from the
group consisting of hydrogen, hydroxy, O-(C₁-C₄ alkyl),
O-(C₂-C₄ alkenyl), and carbonyl;

Ar is selected from the group consisting of 1-
naphthyl, 2-naphthyl, 2-furyl, 3-furyl, 2-thienyl, 2-
pyridyl, 3-pyridyl, 4-pyridyl, and phenyl, having 1-3
substituent(s) independently selected from the group
consisting of hydrogen, halo, hydroxy, nitro, CF₃, C₁-C₆
straight or branched chain alkyl, C₂-C₆ straight or
branched chain alkenyl, O-(C₁-C₄ straight or branched

chain alkyl), O-(C₂-C₄ straight or branched chain alkenyl), O-benzyl, O-phenyl, amino, and phenyl; [.]

D is hydrogen or U; E is oxygen or CH-U, provided that if D is hydrogen, then E is CH-U, or if E is oxygen, then D is U;

U is hydrogen, O-(C₁-C₄ straight or branched chain alkyl), O-(C₂-C₄ straight or branched chain alkenyl), C₁-C₆ straight or branched chain alkyl, C₂-C₆ straight or branched chain alkenyl, C₅-C₇-cycloalkyl, C₅-C₇ cycloalkenyl substituted with C₁-C₄ straight or branched chain alkyl or C₂-C₄ straight or branched chain alkenyl, 2-indolyl, 3-indolyl, (C₁-C₄ alkyl or C₂-C₄ alkenyl)-Ar, or Ar;

J is hydrogen, C₁ or C₂ alkyl, or benzyl; K is C₁-C₄ straight or branched chain alkyl, benzyl or cyclohexylethyl; or J and K are taken together to form a [5-] 7 membered heterocyclic ring which is substituted with oxygen, sulfur, SO, or SO₂; and

said compound has an affinity for FKBP-type immunophilins;

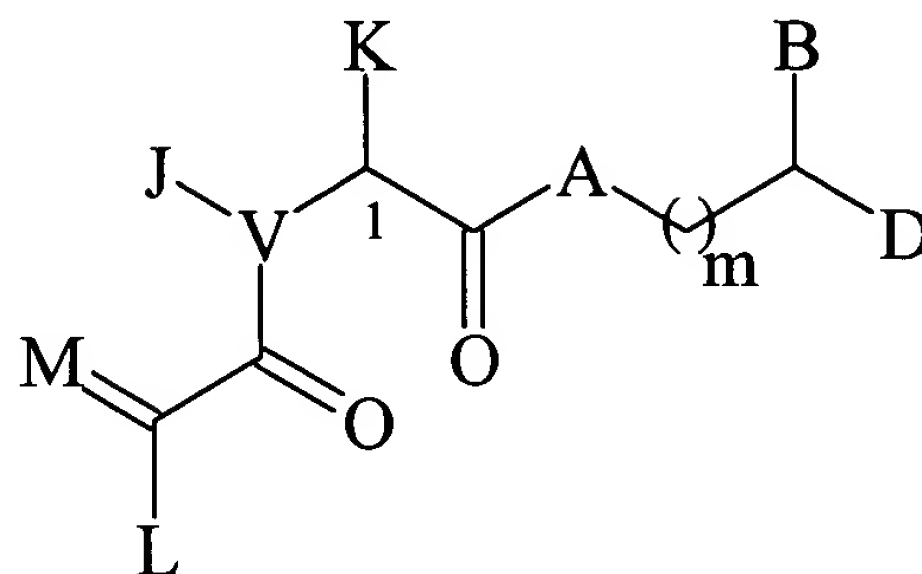
(ii) a second hair revitalizing agent; and

(iii) a pharmaceutically acceptable carrier.

8. (Once amended) A pharmaceutical composition which comprises:

A3 (i) an effective amount of a compound [pipecolic acid derivative] for treating alopecia or promoting hair growth in an animal in need thereof, wherein said

compound is [the pipecolic acid derivative is a compound]
of [formula] formula IV



IV

or a pharmaceutically acceptable salt, ester, or solvate thereof,

wherein:

V is C, N, or S;

J and K, taken together with V and the carbon atom to which they are respectively attached, form a [5-] 7 membered saturated or unsaturated heterocyclic ring [containing] having, in addition to V, one or more heteroatom(s) selected from the group consisting of O, S, SO, SO₂, N, NH, and NR;

R is either C₁-C₉ straight or branched chain alkyl, C₂-C₉ straight or branched chain alkenyl, C₃-C₉ cycloalkyl [cycloakyl], C₅-C₇ cycloalkenyl, or Ar₁,

wherein R is either unsubstituted or substituted with one or more substituent(s) independently selected from the group consisting of halo, haloalkyl, carbonyl, carboxy, hydroxy, nitro, trifluoromethyl, C₁-C₆ straight or

branched chain alkyl, C₂-C₆ straight or branched chain alkenyl, C₁-C₄ alkoxy, C₂-C₄ alkenyloxy, phenoxy, benzyloxy, thioalkyl, alkylthio, sulfhydryl, amino, alkylamino, aminoalkyl, aminocarboxyl, and Ar₂;

Ar₁ and Ar₂ are independently an alicyclic or aromatic, mono-, bi- or tricyclic, carbo- or heterocyclic ring, [;]

wherein the individual ring size is 5-8 members, [;]

wherein said heterocyclic ring has [contains] 1-6 heteroatom(s) independently selected from the group consisting of O, N, and S;

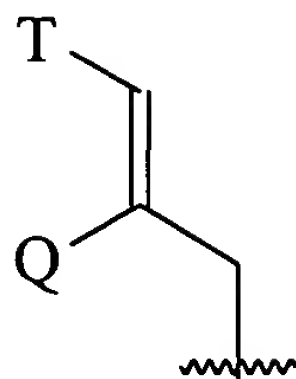
[A, B, D, L, M, and m are as defined in claim 5 above;]

A is O, NH, or N-(C₁-C₄ alkyl);

B and D are independently Ar, C₅-C₇ cycloalkyl substituted C₁-C₆ straight or branched chain alkyl or C₂-C₆ straight or branched chain alkenyl, C₅-C₇ cycloalkenyl substituted C₁-C₆ straight or branched chain alkyl or C₂-C₆ straight or branched chain alkenyl, or Ar substituted C₁-C₆ straight or branched chain alkyl or C₂-C₆ straight or branched chain alkenyl,

wherein in each case, one or two carbon atom(s) of said alkyl or alkenyl is/are optionally substituted with one or two heteroatom(s) independently selected from the group consisting of oxygen, sulfur, SO, and SO₂,

or B and D are independently the fragment



wherein Q is hydrogen, C₁-C₆ straight or branched chain alkyl or C₂-C₆ straight or branched chain alkenyl; and

T is Ar or C₅-C₇ cycloalkyl substituted at positions 3 and 4 with substituents independently selected from the group consisting of hydrogen, hydroxy, O-(C₁-C₄ alkyl), O-(C₂-C₄ alkenyl), and carbonyl;

Ar is selected from the group consisting of 1-naphthyl, 2-naphthyl, 2-furyl, 3-furyl, 2-thienyl, 3-thienyl, 2-pyridyl, 3-pyridyl, 4-pyridyl, phenyl, and monocyclic and bicyclic heterocyclic ring systems with individual ring sizes being 5 or 6, which have in either or both rings a total of 1-4 heteroatoms independently selected from oxygen, nitrogen and sulfur,

wherein Ar has 1-3 substituent(s) independently selected from the group consisting of hydrogen, halo, hydroxy, hydroxymethyl, nitro, CF₃, trifluoromethoxy, C₁-C₆ straight or branched chain alkyl, C₂-C₆ straight or branched chain alkenyl, O-(C₁-C₄ straight or branched chain alkyl), O-(C₂-C₄ straight or branched chain